

# LTECH

## DMX512 DECODER

LT-903-DIP

**3**  
CHANNELS

2 kinds of DMX interfaces  
Shortcut / Over load protection



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### Product Introduction:

1. Designed with 3 channels output, and Max. 8A current per channel, up to 576W output power.
2. Support 2 kinds of DMX ports: 3-pin XLR, RJ45.
3. With RDM remote management protocol, the operations can be completed via the RDM master console, such as parameters browsing & setting, DMX address setting, equipment recognition, etc.
4. With shortcut protection and over load protection, as well as warning function when fault.



FC CE RoHS (warranty 5 years) ISO9001:2008

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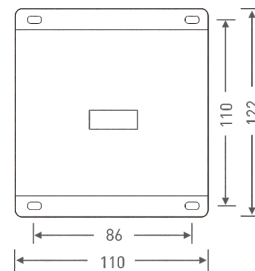
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### Technical Specs:

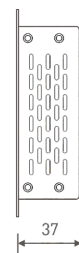
Model: LT-903-DIP  
 Input Signal: DMX512/RDM  
 DMX Interface: 3-pin XLR, RJ45  
 Input Voltage: 12~24Vdc  
 Current Load: 8A × 3CH Max. 24A  
 Output Power: (0~96W...192W) × 3CH  
 Max. 576W  
 Protection: Shortcut / Over load  
 Working Temp.: -30°C~65°C  
 Dimensions: L122×W110×H37mm  
 Package Size: L127×W123×H41mm  
 Weight (G.W.): 550g

### Product Size:

Unit: mm



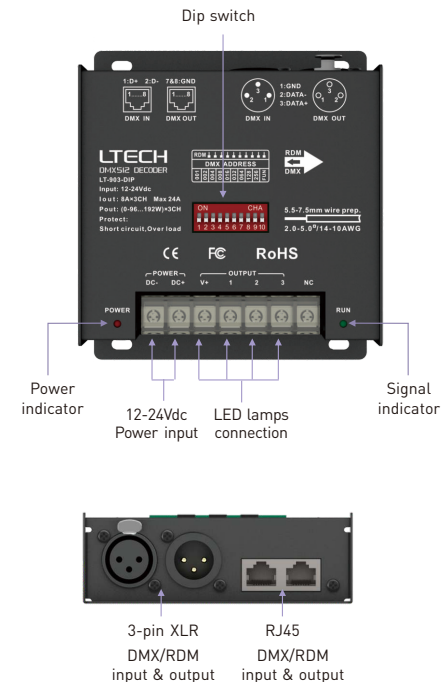
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### Main Component Description:

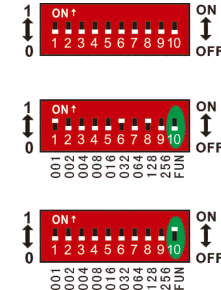


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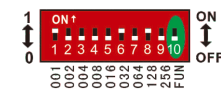
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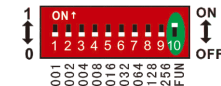
### Dip Switch:



**RDM Mode:** The dip switch 1-10 are OFF.



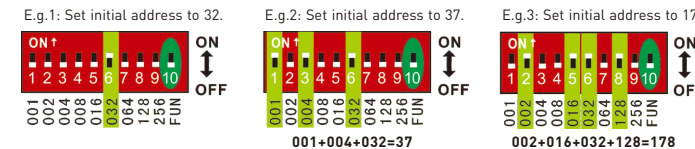
**DMX Mode:** FUN=OFF (the 10th dip switch = OFF)  
Setting DMX addresses with dip switch 1-9



**Self-testing Mode:** FUN=ON (the 10th dip switch=ON)

### How to set DMX address via dip switch:

**FUN=OFF** (the 10th dip switch=OFF) **DMX Mode**  
 DMX address value = the total value of (1-9), to get the place value when in "on" position, otherwise will be 0.



\* When Dip switch 1-9 are OFF, the defaulted initial DMX address is 1.

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### Self-testing Mode:

FUN=ON (the 10th dip switch=ON) Self-testing Mode

Dip Switch	1-9=off	1=on	2=on	3=on	4=on	5=on	6=on	7=on	8=on	9=on
Self-test Function	Static Black	Static Red	Static Green	Static Blue	Static Yellow	Static Purple	Static Cyan	Static White	7 Colors Jumping	7 Colors Smooth



For changing effects (Dip Switch 8/9=on): DIP switch 1-7 is used to realize 7 speed levels. (7=on, the fastest level)

Static Red, Static Blue, Static Purple, Static White, 7 Colors Smooth

Static Green, Static Yellow, Static Cyan, 7 Colors Jumping

[Attn] When several dip switches are on, subjected to the highest switch value. As the figure above shows, the effect will be 7 colors smooth at 7 speed level.

### DMX Dimming Instruction:

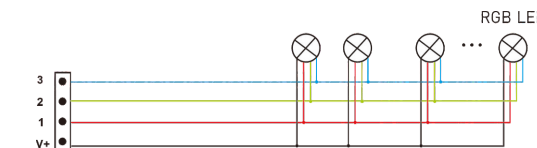
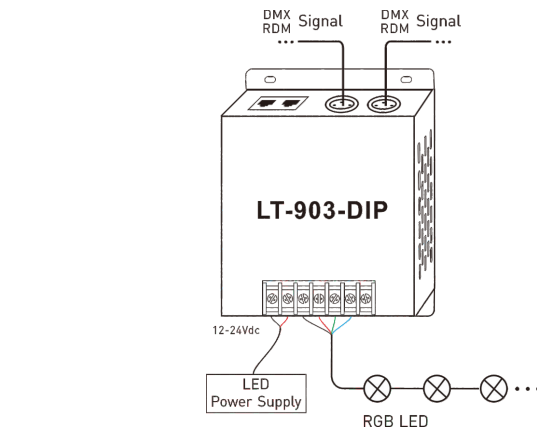
Each LT-903-DIP DMX decoder occupied 3 DMX addresses when connecting the DMX console.

E.g., the defaulted initial address is 1, please find their corresponding relationships in the form.

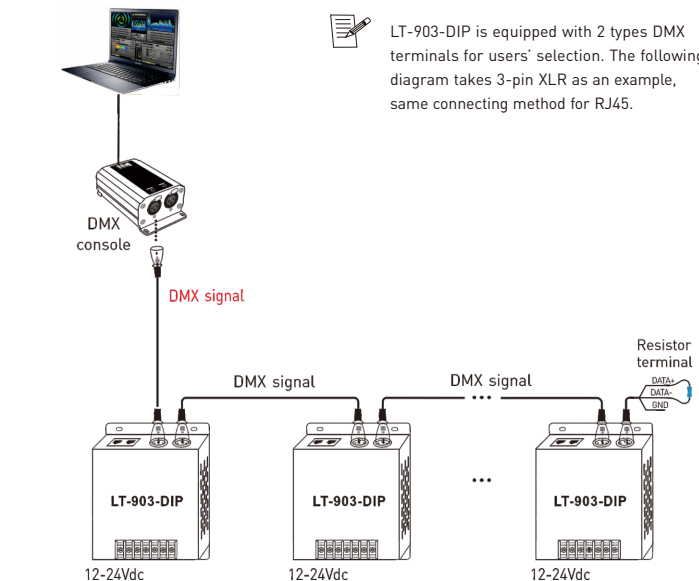
DMX Console	DMX Decoder
CH1 0-255	CH1 PWM 0-100% (LED R)
CH2 0-255	CH2 PWM 0-100% (LED G)
CH3 0-255	CH3 PWM 0-100% (LED B)

### Wiring Diagram:

1 Connecting LED lights:



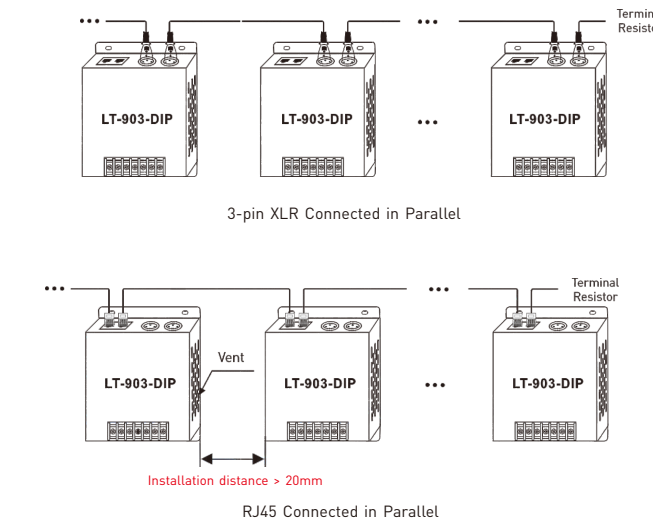
2. DMX console connection:



LT-903-DIP is equipped with 2 types DMX terminals for users' selection. The following diagram takes 3-pin XLR as an example, same connecting method for RJ45.

- \* An amplifier is needed if more than 32 decoders are connected or use overlong signal line, signal amplification should not be more than 5 times continuously.
- \* If the recoil effect occurs because of longer signal line or bad line quality, please try to connect 0.25W 90-120Ω terminal resistor at the end of each line.

3. The connection diagram of 2 kinds of DMX/RDM terminals:



- \* **Installation Attention** : please reserve enough ventilation distance between decoders (>20mm), be sure not to block the vent, or will affect lifetime of decoder for poor heat dissipation.